

Appl. No. 10/518,472  
Amdt. dated June 9, 2006  
Reply to Office Action of June 11, 2006

PATENT

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Original) A primary cultured adipocyte for gene therapy, wherein the adipocyte stably maintains a foreign gene encoding a protein that is secreted outside of a cell.
2. (Original) The adipocyte of claim 1, wherein the gene is transferred to the cell by a retroviral vector or adeno-associated viral vector.
3. (Original) The adipocyte of claim 1, which has the ability to significantly express the protein *in vivo* for at least 20 days.
4. (Original) The adipocyte of claim 1, which is used to release the protein into the blood flow.
5. (Previously presented) The adipocyte of claim 1, wherein the protein is insulin or glucagon-like peptide 1 (GLP-1).
6. (Original) A method of producing an adipocyte for gene therapy, wherein the method comprises the steps of:
  - (1) primary culturing an adipocyte; and
  - (2) transferring, and then stably holding a foreign gene encoding a protein that is secreted outside of the cell.
7. (Original) The method of claim 6, wherein the foreign gene is transferred by a retroviral vector or adeno-associated viral vector.
8. (Previously presented) An adipocyte for gene therapy, which is produced by the method of claim 6.

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9. (Original) An implant composition for gene therapy, wherein the composition comprises a primary cultured adipocyte, which stably holds a foreign gene encoding a protein that is secreted outside of the cell, and a pharmaceutically acceptable carrier.

10. (Original) The implant composition of claim 9, which further comprises an extracellular matrix component.

11. (Original) The implant composition of claim 9, which further comprises an angiogenesis factor.

12.-16 (Cancelled)

17. (Previously presented) An adipocyte for gene therapy, which is produced by the method of claim 7.